NEW HOST RECORDS OF AMBLYPELTA LUTESCENS LUTESCENS (DISTANT) (HEMIPTERA: COREIDAE) IN NORTH-WESTERN AUSTRALIA

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Abstract

Recent records of Amblypelta lutescens lutescens (Distant) (Hemiptera: Coreidae) from the Ord River area of Western Australia confirm its presence in that area.

The insect was observed feeding on six plant species not previously known to be hosts, three of which supported breeding.

Introduction

Amblypelta lutescens lutescens (Distant) (banana-spotting bug) is regarded as a major pest of macadamia nut, banana and pawpaw in the coastal belt of Queensland (Ironside 1978, Donaldson 1983). Donaldson (1983) reported that the insect was distributed "from Brisbane to the Torres Strait islands but not very far inalnd" and also in the Northern Territory near Katherine and Darwin. In April 1982, a breeding population was found on ornamental cassava (Manihot esculenta Crantz., Fam. Euphorbiaceae) at Lake Argyle village (Lat. 16°12'S; Long. 128°45'E) some 435 km WSW of Katherine (Lever 1982).

This paper records the species on other host plants and at other locations in the Ord River area of Western Australia.

New host plant records

Alphitonia exelsa (Fenzl.) Benth. (soapbush) (Fam. Rhamnaceae). 2 00, Packsaddle Creek, 16 km SSW of Kununurra, Western Australia; September 1983. Adults were collected while feeding on hardened flush shoots of this native tree but no damage was noted.

Anacardium occidentale L. (cashew nut) (Fam. Anacardiaceae). 2 \$\footnote{\text{Q}}\text{, 1 d, 3 nymphs,}\$ Kimberley Research Station, 14 km NNE of Kununurra, Western Australia; September/October 1983. Adults and nymphs were observed to feed on soft flush shoots and the developing cashew apple and nut. Subsequently, flush tissue withered and died while the apples became severely distorted.

Eucalyptus camaldulensis Dehn. (river gum) (Fam. Myrtaceae). 2 99, 2 00, Kununurra, Western Australia; November 1983. Mating pairs of adults were collected from soft flush tissue of a tree 3 m high. Feeding damage was subsequently noted.

Glycine max L. (Merrill) (soybean) (Fam. Fabaceae). 2 99, Kimberley Research Station, Kununurra, Western Australia; July 1983 and March 1984. Adults were collected by sweepnetting soybean plots at the full-pod stage.

Pedilanthus tithymaloides (L.) Poit. (zigzag plant) (Fam. Euphorbiaceae). 1 \, 1 \, \dots, 2 \, nymphs, Lake Argyle village, 39 km S of Kununurra, Western Australia; November 1982. Adults and nymphs were collected from damaged shoots of this widely grown ornamental plant.

Plumeria rubra L. (frangipani) (Fam. Apocynaceae). 2 99, 1 of, 1 nymph, Lake Argyle village, Kununurra, Western Australia; November 1982. Adults and nymph were observed on severely damaged shoots of trees which also showed dieback and proliferation of new shoot growth.

Psidium guajava L. (guava) (Fam. Myrtaceae). 1 of, Kimberley Research Station, Kununurra, Western Australia; November 1982. Feeding punctures were noted on developing fruit and one feeding adult was collected.

Discussion

Feeding damage by Amblypelta spp. to fruit, stems and petioles was described by Brown (1958), who stressed that the effects were "out of proportion" to the physical damage done by feeding or to the numbers of insects involved. Brown (1958) reported a total of 23 host plants of A. l. lutescens of which three were breeding records and 10 others were for feeding. However, Donaldson (1983), who provided further morphological characters for the separation of the three Australian species in this genus. reduced this list to 13 plant species based on label data for the 184 specimens examined. Of these, only four were feeding and/or breeding records and only one (Morus nigra L., mulberry) was new. The information reported here indicates the polyphagous nature of A. l. lutescens by adding six new feeding records and endorses Brown's (1958) findings for cassava and frangipani. A. l. lutescens has now been confirmed to breed or feed on 10 plant species from eight families but it is likely that many other plants are attacked. For example, although no feeding damage has been observed, it would be surprising if the genus Ficus does not contain host plants since the banana-spotting bug has now been associated with Ficus sp. (rough leaved fig) by Brown (1958), F. carica L. (fig) (Donaldson 1983) and I have recorded a single adult on a leaf of F. leucotricha Miq. (rock fig).

More importantly, the pest has now been recorded from the Ord River area where horticultural tree crop industries, particularly banana, mango and cashew, are being developed. A single specimen of A. l. lutescens was collected from the Ord River area (Richards 1968) some three years before commercially grown crops were produced indicating that the present population is probably not due to a recent introduction. It is likely that the species was not detected or collected between 1961 and April 1982 because of its low population density as evidenced by the small numbers reported in these observations.

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